CLAIM AMENDMENTS

The following listing of claims will replace all prior claim listings in this application.

Additions are indicated by underlining. Deletions are indicated by strikethrough.

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
5. (Cancelled)
6. (Cancelled)
7. (Cancelled)
8. (Cancelled)
9. (Cancelled)
10. (Cancelled)
11. (Cancelled)
12. (Cancelled)
13. (Cancelled)
14. (Cancelled)
15. (Cancelled)
16. (Cancelled)
17. (Cancelled)
18. (Cancelled)

19. (Currently Amended) In combination, ~~an electrically conductive or semi-conductive surface~~ a light incident surface of a photovoltaic cell and a current collector structure for collecting current from said ~~electrically conductive or semi-conductive~~ light incident surface, said current collector structure comprising,

- a sheetlike substrate having a first substrate surface, said first substrate surface comprising a polymeric adhesive,
- a first material overlaying a portion of said first substrate surface, said first material comprising a polymer~~,~~ and further characterized as being selectively positioned ~~on~~ over said first substrate surface in a first trace pattern,
- ~~an electrically conductive~~ a second material ~~coating~~ overlaying said first trace pattern, said second material being electrically conductive, said second ~~electrically conductive~~ material forming a second pattern characterized as substantially replicating at least a portion of said first trace pattern,

said combination characterized by having at least a portion of said second ~~electrically conductive~~ material positioned between said first material and said ~~conductive or semi-conductive~~ light incident surface.

20. (Cancelled)

21. (Currently amended) The combination of claim ~~20~~ 19 wherein said photovoltaic cell comprises a thin film semiconductor structure.

22. (Currently amended) The combination of claim 21 wherein said thin film semiconductor structure is ~~supported~~ positioned on a self-supporting metal based foil.

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Currently amended) The combination of claim ~~26~~ 19 wherein portions of said first substrate surface are adhesively bonded in direct contact to said ~~conductive or semi-conductive surface~~ light incident surface.

28. (Cancelled)

29. (Currently amended) The combination of claim 19 wherein said sheetlike substrate comprises a material containing silicon.

30. (Cancelled)

31. (Currently amended) The combination of claim 19 wherein said second pattern comprises multiple fingers joined by a buss, and wherein said second pattern is further characterized as comprising a monolithic ~~metal~~ deposit of conductive material extending to form portions of both said multiple fingers and said buss.

32. (Previously presented) The combination of claim 19 wherein said first material comprises printed material.

33. (Previously presented) The combination of claim 19 wherein said first material comprises a material component characterized as having the ability to assist deposition of metal.

34. (Currently amended) The combination of claim ~~33~~ 19 wherein said first material ~~component is~~ comprises an electrically conductive polymer consisting of a homogeneous mixture of conductive particles in a polymeric matrix.

35. (Currently amended) The combination of claim ~~33~~ 19 wherein said first material ~~component is~~ comprises a directly electroplateable resin (DER).

36. (Previously presented) The combination of claim 33 wherein said material component comprises a seed catalyst suitable for initiating chemical metal deposition.

37. (Currently amended) The combination of claim 19 wherein said ~~electrically conductive~~ second material comprises an electroplated metal or metal-based alloy.

38. (Currently amended) The combination of claim 37 wherein said electroplated metal or metal-based alloy comprises copper .

39. (Currently amended) The combination of claim 19 wherein said ~~electrically conductive~~ second material comprises a low melting point metal based material.

40. (Currently amended) The combination of claim 39 wherein said ~~electrically conductive~~ second material comprises indium.

41. (Currently amended) In combination, a light incident surface of a photovoltaic cell ~~an electrically conductive or semi-conductive surface~~ having dimensions being defined by peripheral edges of said surface ~~and an electrical interconnect~~ and a current collector structure,

said ~~interconnect~~ current collector structure comprising,

- ~~a~~ an optically transparent or translucent base substrate and,
- a layered structure comprising a first layer positioned over a first surface of said base substrate and a second layer overlaying said first layer, ~~said layered structure comprising layers of a first material and a second material,~~
- said ~~layered structure~~ first layer having structure defining ~~forming~~ a pattern of one or more lines extending over said base substrate,

- said first ~~material~~ layer comprising a polymer and characterized as having ~~the ability to assist in deposition of metal~~ a substantially homogeneous cross sectional composition,

- said second layer ~~material~~ comprising a conductive material, ~~metal deposit covering said first material,~~

said combination further characterized as having a first portion of said layered structure extending over said ~~electrically conductive or semi-conductive~~ light incident surface such that said second layer ~~material~~ is positioned between said first layer ~~material~~ and said ~~electrically conductive or semi-conductive surface~~ light incident surface of a photovoltaic cell.

42. (Cancelled)

43. (Cancelled)

44. (Currently amended) In combination, ~~an electrically conductive or semi-conductive surface~~ a light incident surface of a photovoltaic cell and a current collector structure,

- said light incident surface characterized as being substantially planar and having a substantially uniform surface composition,

- said current collector structure comprising one or more traces ~~overlaying~~ positioned on a sheetlike substrate, said traces comprising a first homogeneous material comprising a polymer and having the ability to assist metal deposition, said first material having a first surface and an oppositely facing second surface, said first surface facing toward said substrate and being devoid of metal coating and said second surface being coated with a metal deposit, ~~said metal in electrical communication with said conductive or semi-conductive surface~~

- said combination characterized as having said one or more traces overlaying and in electrical communication with said light incident surface.

45. (Cancelled)

46. (Currently amended) The combination of claim ~~45~~ 31 wherein said monolithic ~~metal~~ deposit of conductive material is an electrodeposit.

47. (Currently amended) The combination of claim 19 wherein said first material comprises a polymeric ~~adhesive~~ material functioning to adhesively join said electrically conductive material to said first substrate surface.

48. (Currently amended) The combination of claim 41 further characterized as having a second portion of said layered ~~pattern~~ structure extending outside a said peripheral edge of said ~~electrically conductive or semi-conductive surface~~ light incident surface.

49. (Previously presented) The combination of claim 44 wherein said metal deposit comprises an electrodeposit.

50. (Currently amended) The combination of claim 44 wherein said first material is ~~in a~~ printed ~~form~~ material.

51. (New) The combination of claim 44 wherein said first and second surfaces are substantially planar.

52. (New) The combination of claim 19 wherein said first material comprises a material blend of polymer and silver.

53. (New) The combination of claim 19 wherein said first material comprises carbon black.

54. (New) The combination of claim 19 wherein said second material is in direct contact with said light incident surface.

55. (New) The combination of claim 29 wherein said silicon containing material is in the form of a barrier layer.

56. (New) The combination of claim 31 wherein said light incident surface has dimensions defined by peripheral edges, and further characterized as having said buss extending outside a said peripheral edge to serve as a contact surface for connection to an additional conductive surface.

57. (New) The combination of claim 19 wherein said first material is in direct contact with said first substrate surface.

58. (New) The combination of claim 19 wherein said first material is not in direct contact with said first substrate surface.

59. (New) The combination of claim 19 wherein said first and second materials are in direct contact.

60. (New) The combination of claim 19 wherein said first and second materials are not in direct contact.

61. (New) The combination of claim 41 wherein either of said first or second layers is characterized as comprising material having the ability to assist in deposition of said conductive material.

62. (New) The combination of claim 61 wherein said conductive material comprises electroplated metal.